Météo France

User guide

Automatisation récupération des sources, compilation et packaging de OpenDJ

Version   Le 30/09/2015

Identifiant : –

Fichier original : **13814-01_MeteoFrance_Scripts-OpenDJ_User-guide_v1.4.odt**

User guide
Automatisation récupération des sources, compilation et
packaging de OpenDJ

Historique des évolutions et visas

Visas

	RÉDACTION	APPROBATION	VALIDATION
NOM	Slim CADOUX	Guilhem VALENTIN	Guilhem VALENTIN
FONCTION	Intégrateur système	Directeur de projets	Directeur de projets
DATE	28/09/2015	30/09/2015	30/09/2015
VISA			

Historique des évolutions

VERSION	DATE	ACTEUR CONTRIBUTEUR	OBJET DE L'ÉVOLUTION
0.1	28/09/2015	Slim CADOUX	Création.
1.0	30/09/2015	Guilhem VALENTIN	Approbation et validation
1.4	06/10/2016	Yves GOUPIL – Michaël CLAUDON	Petites modifications

Statut du document : **51 – Validé**

Diffusion du document

Mention de diffusion : **Groupe Linagora**

NOM	ORGANISME	POUR	MÉDIA
Tous les collaborateurs du projet	LINAGORA	Information	Courriel, LinShare
Tous les collaborateurs du projet	Météo France	Action	Courriel, LinShare

Liste des contributeurs

- Slim CADOUX

- Guy GODFROY

- Guilhem VALENTIN

- Yves GOUPIL

- Michaël CLAUDON

User guide
Automatisation récupération des sources, compilation et
packaging de OpenDJ

Table des matières

User guide
Automatisation récupération des sources, compilation et
packaging de OpenDJ

1   Introduction

This document describes the extraction, compilation and the packaging of OpenDJ.

OpenDJ is a ldapv3 protocol implementation written in java.

It is maintained and developed by the company ForgeRock as an OpenSource software.

For more information about this software, you can refer to the following links :

- https://en.wikipedia.org/wiki/OpenDJ

- http://opendj.forgerock.org/

User guide
Automatisation récupération des sources, compilation et
packaging de OpenDJ

2   Extraction, compilation, and packaging

2.1   Repository

The repository used is the official ForgeRock github repository. It is available at the following URL :

https://github.com/OpenRock/OpenDJ

This repository is a mirror of the repository hosted by ForgeRock :

https://stash.forgerock.org/projects/OPENDJ/repos/opendj

2.2   Prerequisites

Note: the scripts to build OpenDJ package do not depend on the scripts to build OpenAM package and their dependencies. They only depend on the elements listed in this chapter.

OpenWIS must be run as user `openwis`. The home folder path of this user must be `/home/openwis/`.

Before downloading the sources, their compilation and the packaging of the software, your server needs the following dependencies :

```
# yum install git
# yum install wget
# yum install rpmdevtools
```

Depending on your operating system, you can add the « epel » repository like this:

- CentOS 6.*

```
# wget http://download.fedoraproject.org/pub/epel/6/x86_64/epel-release-6-8.noarch.rpm
# rpm -ivh epel-release-6.8.noarch.rpm
```

- CentOS 7

```
# wget http://download.fedoraproject.org/pub/epel/7/x86_64/epel-release-7.5.noarch.rpm
# rpm -ivh epel-release-7.5.noarch.rpm
```

Finally you can install java :

```
# yum install java-1.7.0-openjdk-devel
```

Export the JAVA_HOME variable if needed.

2.3   Scripts installation

Scripts can be untarred in any folder.

```
tar zxvf build-opendj*.tar.gz
```

User guide
Automatisation récupération des sources, compilation et
packaging de OpenDJ

3   Detailed procedure

All this procedure can be run as a regular user (for example, as `openwis` user).

You have to add rights to run shell scripts as a regular user. In build-scripts/opendj-build folder :

```
chmod 755 *.sh
```

3.1   Sources download

The script **opendj-00-download.sh** requests a configuration file.

3.1.1   OpenDJ-config

```
#CONFIG FILE for opendj-00-download.sh
GIT=/usr/bin/git                                    #GIT PATH variable
REPO=https://github.com/OpenRock/OpenDJ.git         #repository location
TAG=2.6.0                                           #tag/version OpenDJ repository
```

3.1.2   opendj-00-download.sh

To download the sources, we launch the script :

```
./opendj-00-download.sh
```

The script will realize 4 steps :

- Step 00 : Downloading sources from the URL written on the REPO variable.

- Step 01 : `git checkout $TAG`.

- Step 02 : `git branch -D`.

- Step 03 : `git checkout -b master`.

We use the return value of git in order to know if a step has succeeded or failed.

If anything happens (unknown tag or wrong URL) it will stop and let you know where if has failed.

3.2   Sources compilation

Once the sources have been downloaded, we can compile them with the command :

```
./opendj-01-compil.sh
```

It will simply execute the script **build.sh** located in the sources, then copy the directory with the compiled software in our $HOME.

The repository we have compiled on the last step contains every part of a fully capable OpenDJ server for Microsoft, Apple and Linux Operating Systems. This documentation is about Linux Only.

User guide
Automatisation récupération des sources, compilation et
packaging de OpenDJ

3.3   OpenDJ packaging

This step requires a very precise environment in order to build our package.

> We will work from the repository downloaded with **opendj-00-download.sh** script, the compilation will happen during the packaging and so **opendj-01-compil.sh** is not used in this part.

3.3.1   opendj-02-package.sh

This script requires the following file in addition of the repository downloaded in 2.3.1 part.

The file `OpenDJ.spec` looks like this:

```
Name:           OpenDJ
Version:        2.6.0
Release:        1%{?dist}
Summary:        OpenDJ packaging test

Group:          java
License:        GPL
URL:            http://opendj.forgerock.org/
Source0:        OpenDJ.tar.gz

BuildRequires:  java-1.7.0-openjdk-devel
Requires:       java-1.7.0-openjdk-devel

%description
Simple rpm package using the build.sh script from the sources of OpenDJ

%prep
%setup -q -n OpenDJ
getent passwd openwis || useradd -r -d /root -m openwis

%build
./build.sh

%install
rm -rf $RPM_BUILD_ROOT
mkdir -p $RPM_BUILD_ROOT/root
cp -r %{_builddir}/OpenDJ/build/package/OpenDJ-2.6.0 $RPM_BUILD_ROOT/root
chown -R openwis:openwis $RPM_BUILD_ROOT/root/OpenDJ-2.6.0

%clean
rm -rf $RPM_BUILD_ROOT

%files
%defattr(-,openwis,openwis,-)
%doc
%config(noreplace) /root/OpenDJ-2.6.0/*

%changelog
```

Our script will put this file into the following directory :

User guide
Automatisation récupération des sources, compilation et
packaging de OpenDJ

```
$HOME/rpmbuild/SPECS/
```

And then it will use the following command to build your package :

```
$ rpmbuild -ba $HOME/rpmbuild/SPECS/OpenDJ.spec
```

The .rpm file is available in the directory **$HOME/rpmbuild/RPMS/x86_64/**

As you can see on the .spec file, the directory containing OpenDJ software will be installed in **/root.**

You can modify this path in the .spec file, just change the fields written in red.

You can modify the user:group according to your own regular user and group, just change the fields written in purple.

3.4   All in one

We have added a final script called **opendj-all.sh**, which will do every steps described above.

Just put every file associated with this documentation on the root of your **$HOME** and launch opendj-all.sh

3.5   Additional notes

To install your package, execute the following command as root, in $HOME/rpmbuild/RPMS/ directory :

```
# rpm -i name-of-package.rpm
```

To uninstall it just do:

```
# rpm -e name-of-package
```